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Applicant:	Dasa Lipovsek et al.	Art Unit:	1653
Serial No.:	09/456,693	Examiner:	Schnizer, H.
Filed:	December 9, 1999	Customer No.:	31020
Title:	PROTEIN SCAFFOLDS FOR ANTIBODY MIMICS AND OTHER BINDING PROTEINS		

Assistant Commissioner for Patents
Washington, D.C. 20231

SUBMISSION OF SECOND SET OF FORMAL DRAWINGS

As requested, Applicants submit herewith a second set of formal drawings identical to those submitted on January 17, 2002.

If there are any charges, or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 16 January 2003

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\\Clark-w2k1\documents\50036\50036.021002 Submission of second set of drawings.wpd

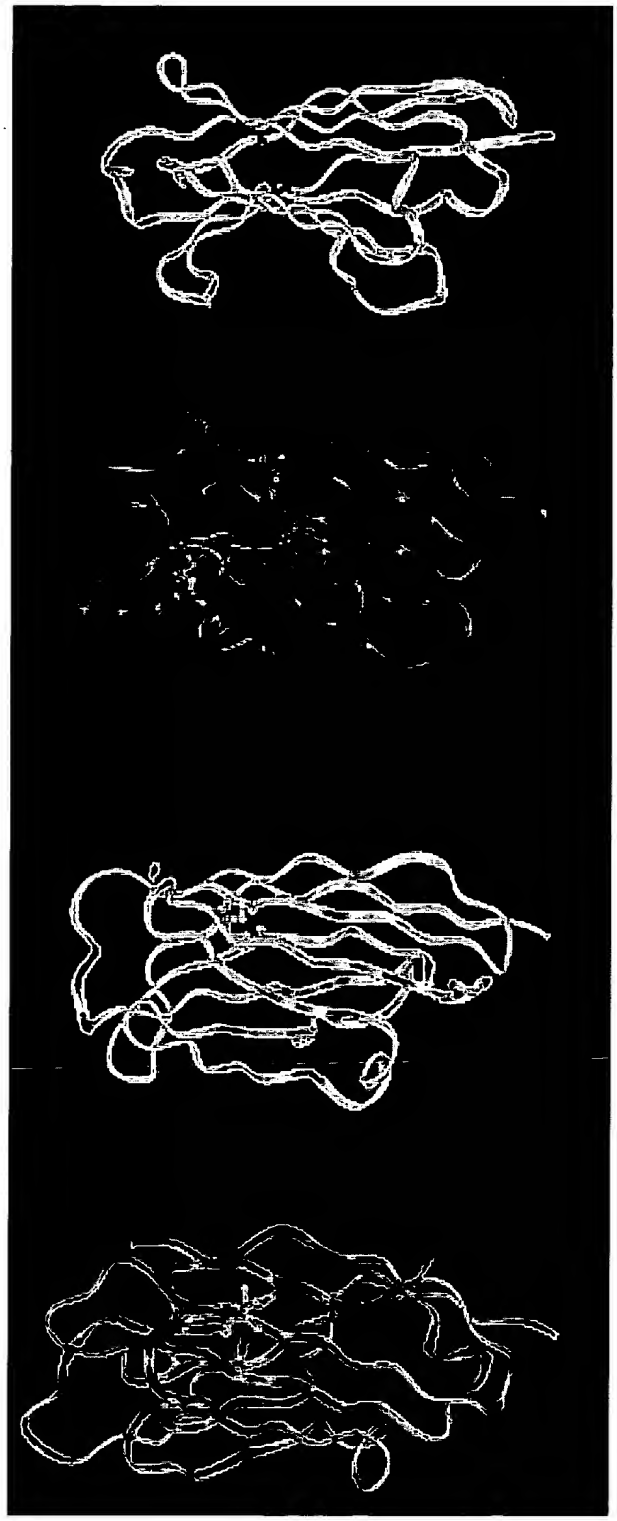

Fig. 1

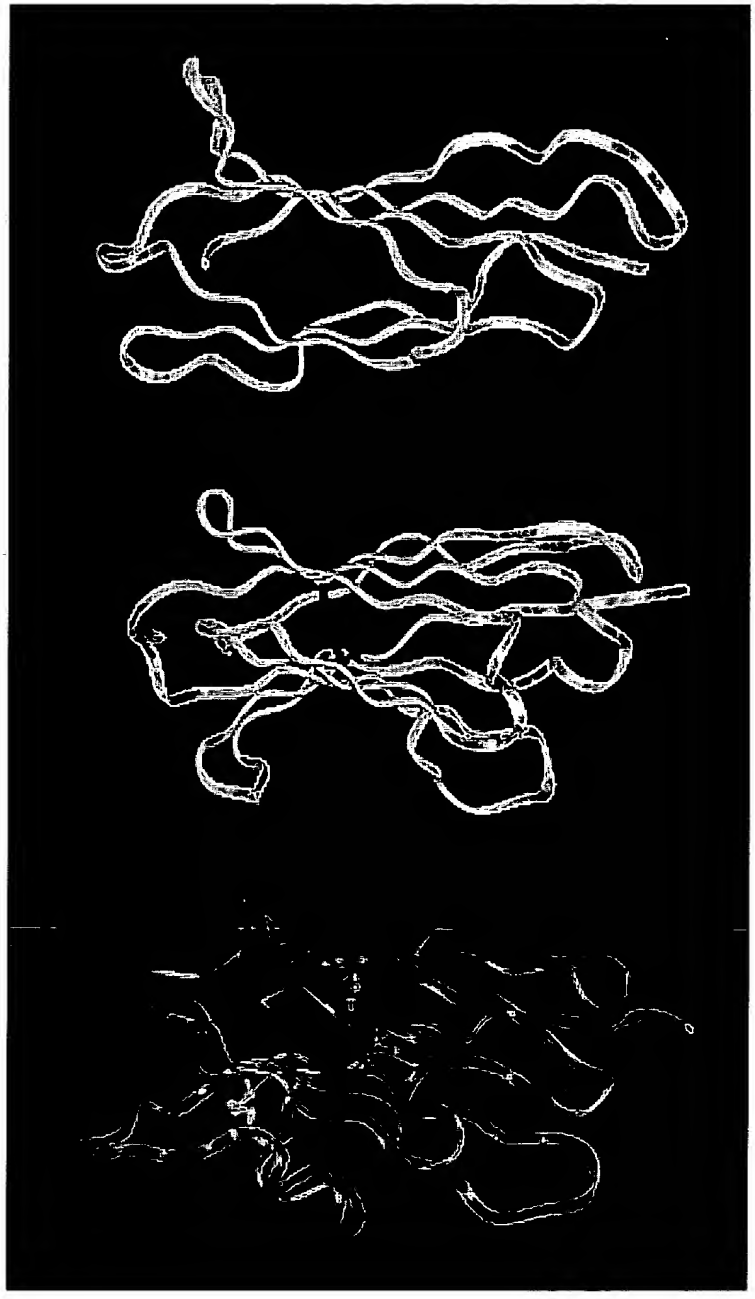

Fig. 2

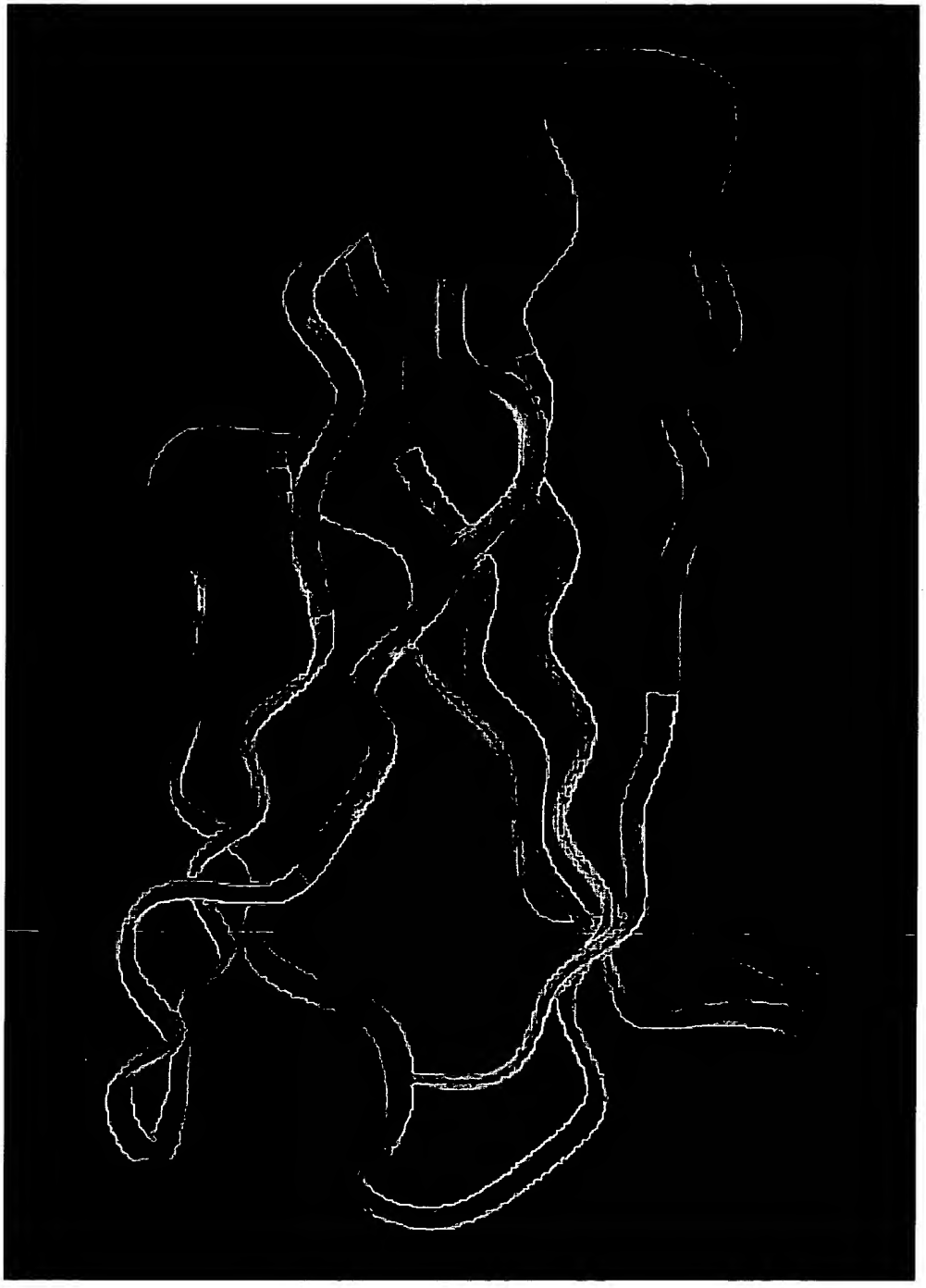

Fig. 3

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                1       9 10      19 20      29 30    37   38      47 48      57 58      67 68      77 78      87 88   94
Hs FND  VSDVPRD-LE VVAATPTSLL ISWDAPAVTV RYYRITYG-- ETGGNSPVQE FTVPGSKSTA TISGLKPGVD YTITVYAVTG RGDSPASSKP ISINYRT     94
Bt FN   VSDVPRD-LE VIAATPTSLL ISWDAPAVTV RYYRITYG-- ETGGSSPVQE FTVPGSKSTA TISGLKPGVD YTITVYAVTG RGDSPASSKP VSINYRT   1510
Rn FN   VSDVPRD-LE VIASTPTSLL ISWEpPAVSV RYYRITYG-- ETGGNSPVQE FTVPGSKSTA TINnIKPGAD YTITLYAVTG RGDSPASSKP VSINYQT   1611
Mm FN   VSDIPRD-LE VIASTPTSLL ISWEpPAVSV RYYRITYG-- ETGGNSPVQE FTVPGSKSTA TINnIKPGAD YTITLYAVTG RGDSPASSKP VSINYKT    712
Oc FN   VSDVPRD-LE VIASTPTSLL ISWEXPAVTV RYYRITYG-- ETppN----- ---------- ---------- ---------- ---------- -------     64
Gg FN   VSDVPRD-LE VNpTSPTSLE ISWDAPAVTV RYYRITYG-- ETGGSSPVQE FTVPGTMSrA TITGLKPGVD YTITVYAVTG RGDSPASSKP VTVTYKT    443
Xl FN   VSDVPTD-LE VTSSSPNTLT ISWEAPAVSV RYYRITYS-- QTGGhGPEKE FTVPGTSNTA TIRGLNPGVS YTITVYAVTG RGDSPASSKP LTIIHKT   1611
Cf FN   AiDAPSn-Lr FLATTPnSLL VSWQpPrArI TGYIIKYe-- kpGSpprEVV prprPGVTeA TITGLePGTE YTIQVIALKn NQKSepLIGr kKTdEL-    197
Ec FN   AiDAPSn-Lh FLATTPnSLL ISWQpPrArI TGYIIKYe-- kpGSpprEVV prphPGVTeA TITGLePGTE YTIQVIAIKn NQKSepLIGr rKTdEp-    197
Hs TC   VS-PPKD-Lv VTeVTeeTVN LAWDn-eMrV TeYLVVYTP- -THEGGlEMQ FrVPGDQTST IIQeLePGVE YFIRVFAILe NKKSipVSAr V------    686
Ss TP   VS-PPKD-Li VTeVTeeTVN LAWDn-eMrV TeYLIVYTP- -THEdGlEMQ FrVPGDQTST TIReLePGVE YFIRVFAILe NKKSipVSAr V------    686
Mm TX   MiDGPQD-Lr VVAVTPTTLD LSWlrPQAeV DrFVVSYV-- --SAGNqRVr LeVPPEADrT QLTdLMPGVE YVVTVTAERG HAVSypASIr ANTG---    889
Hs CAP  TlpVPvvSLn IYdVGPTTMH VQWQp-VGGA TGYILSYkPV kDTEpTrpKE VrLGPTVNdM QLTdLVPNTE YAVTVQAVLh dLTSepVTVr e------   1551
Oc C12  TlpVPvvSLN IYdVGPTTMH VQWQp-VGGA TGYILSYkPV kDTEpTrpKp QdVkLRdVTH ---------- ---------- ---------- -------    322
Gg C14  LalpmaSDLk LYdVShSSMR AKWnG-VAGA TGYMILYAPL TEGLAAdEKE IkIGEASTeL ELDGLLPNTE YTVTVYAMF- ---------- -------    508
Hs U1   LalpmaSDLl LYdVTenSMR VKWDA-VpGA SGYLILYAPL TEGLAGdEKE MkIGETHTdI ELSGLLPNTE YTVTVYAMFG eeASDpVTGq e------    321

var.    --- --  -   -  --       -----   -    -   --------  - -  - -    - -           - --  --   - -  - -

cons.     P  L  V     SL    W      V   Y I Y                    I  L PGVD Y ITV A   G      S      P
          M     I     TV          A   F V                      L  I  NTE   VQL     N          R
                L      M          I     L                          AS    R      E
                 F
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CAP	Collagen alpha precursor	BOLD	identical to Hs FND
C12	Collagen type 12		
FND	Fibronectin type III domain	lower case	non-conservative substitution
FN	Fibronectin		(charge reversal, change between hydrophobic and charged, addition or removal of P)
TP	Tenascin precursor	-	position of non-conservative substitutions
TC	Tenascin-C		
U1	Undulin 1		

Bt	Bovis taurus	cow
Cf	Canis familiaris	dog
Ec	Equus caballis	horse
Ss	Sus scrofa	pig
Hs	Homo sapiens	human
Oc	Oryctolagus cuniculus	rabbit
Xl	Xenupus laevis	African clawed frog

Fig. 4

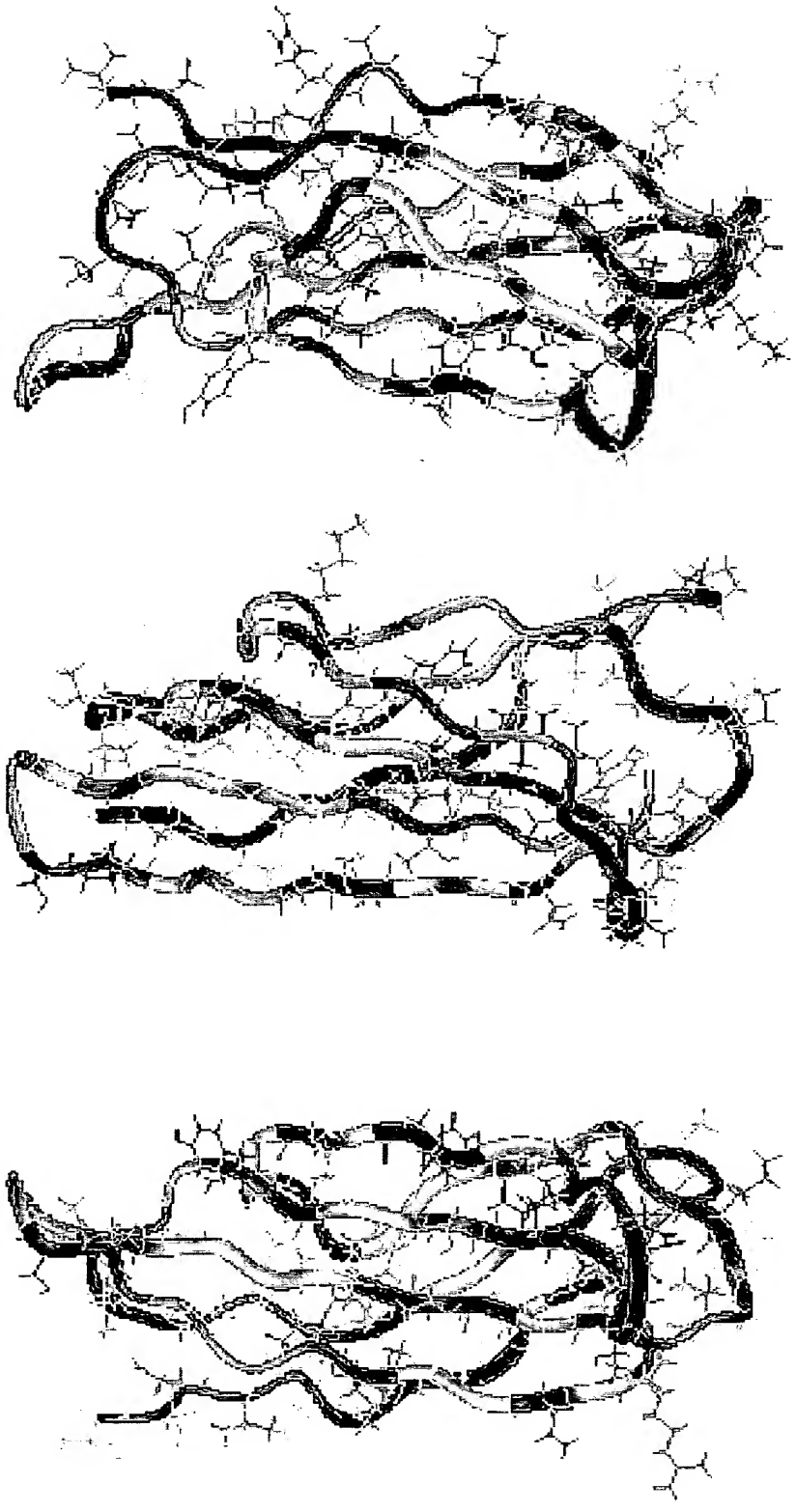

Fig. 5

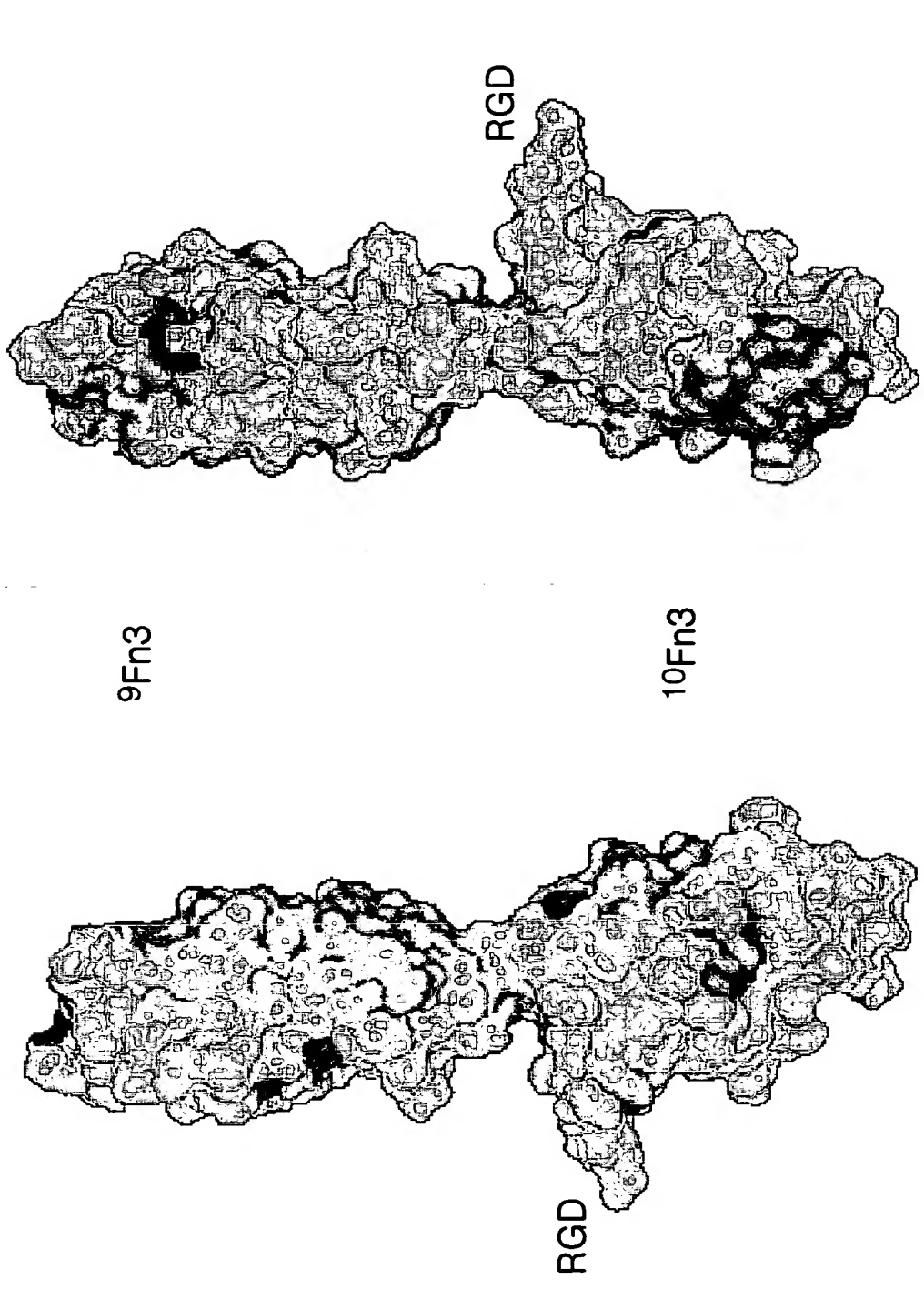

Fig. 6

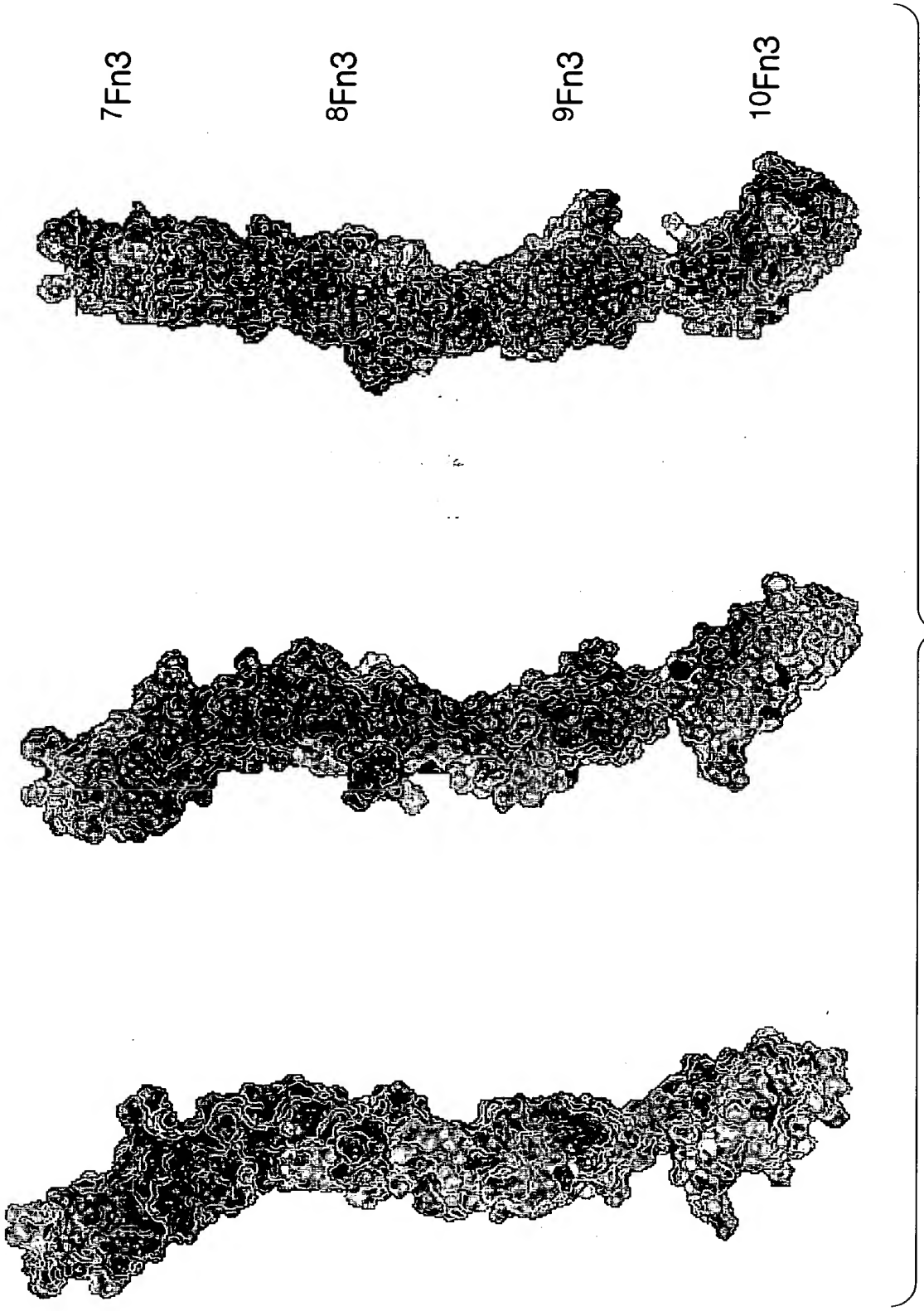

Fig. 7

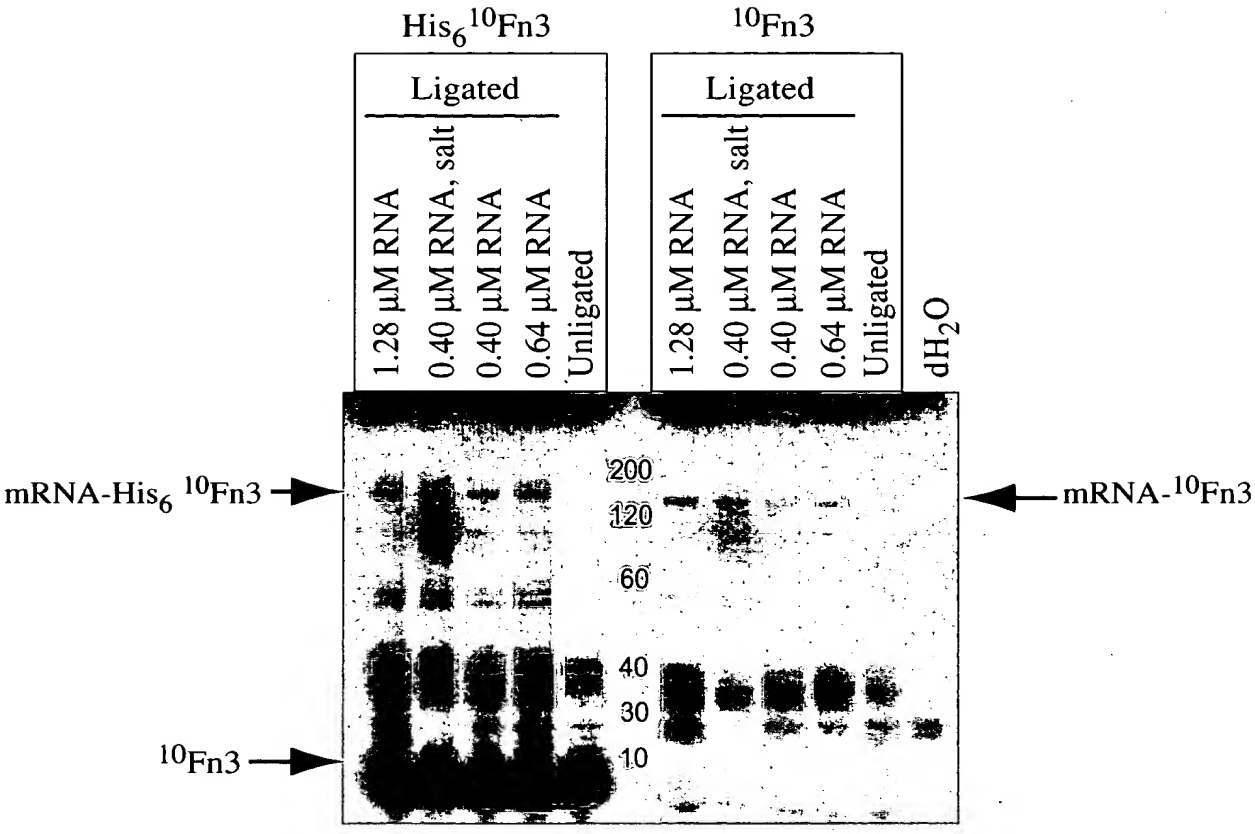
His6 10Fn3
10Fn3
Ligated
Ligated
1.28 µM RNA
0.40 µM RNA, salt
0.40 µM RNA
0.64 µM RNA
Unligated
1.28 µM RNA
0.40 µM RNA, salt
0.40 µM RNA
0.64 µM RNA
Unligated
dH2O
mRNA-His6 10Fn3
10Fn3
200
120
60
40
30
10
mRNA-10Fn3

Fig. 8

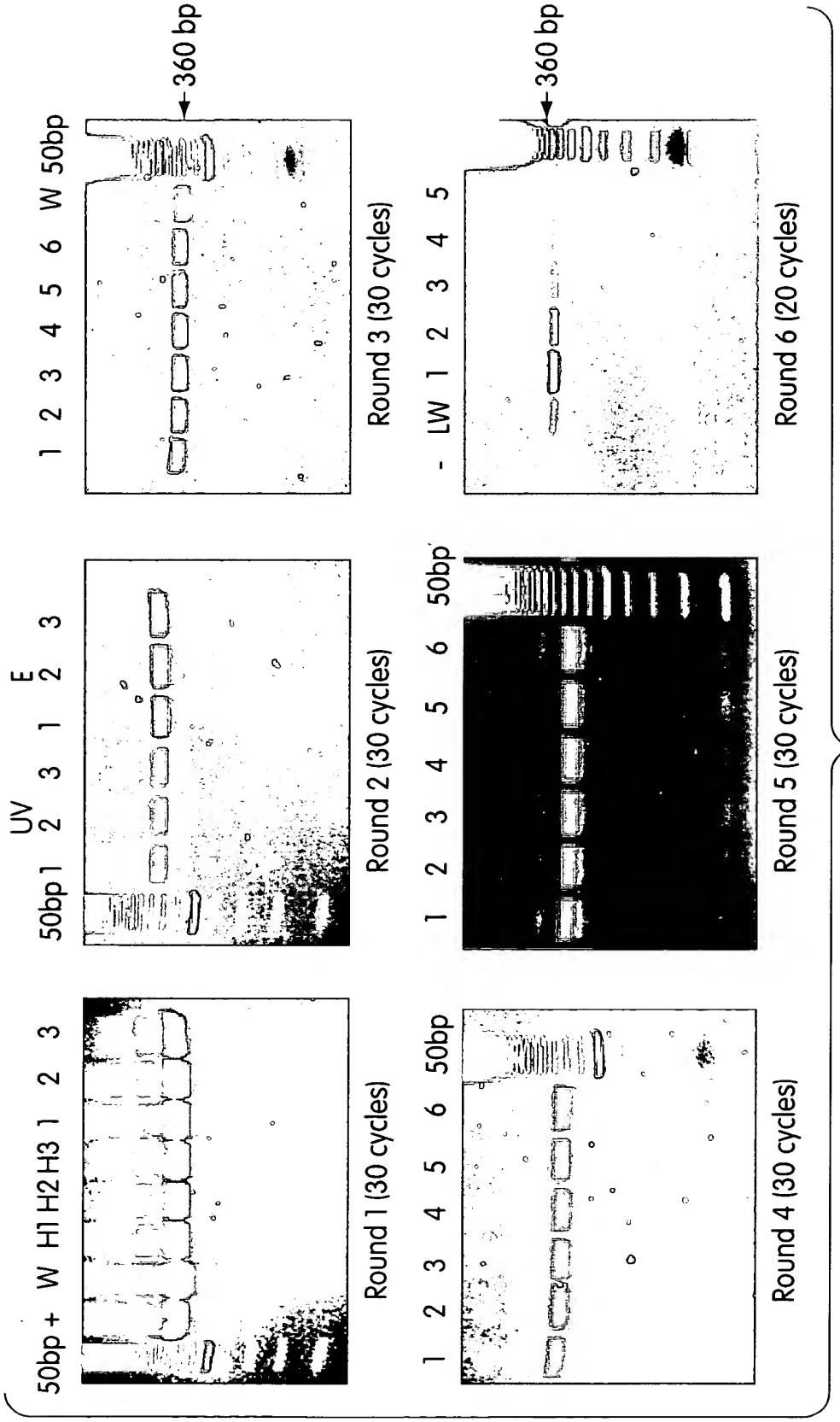
50bp + W H1 H2 H3 1 2 3
Round 1 (30 cycles)
UV
50bp 1 2 3 1 2 3
E
Round 2 (30 cycles)
1 2 3 4 5 6 W 50bp
360 bp
Round 3 (30 cycles)
1 2 3 4 5 6 50bp
Round 4 (30 cycles)
1 2 3 4 5 6 50bp
Round 5 (30 cycles)
- LW 1 2 3 4 5
360 bp
Round 6 (20 cycles)

Fig. 9

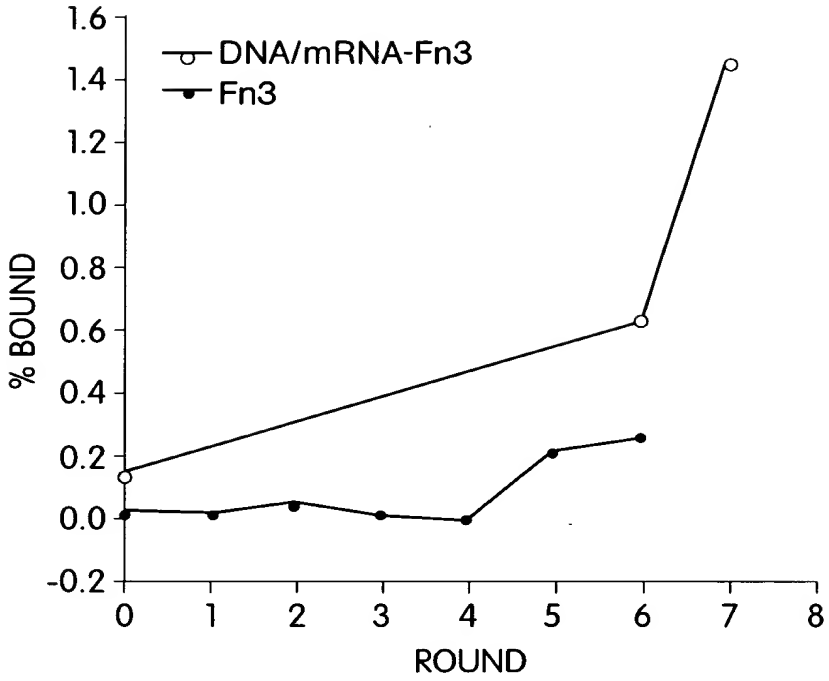
DNA/mRNA-Fn3
Fn3
% BOUND
ROUND
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
0
1
2
3
4
5
6
7
8

Fig. 10

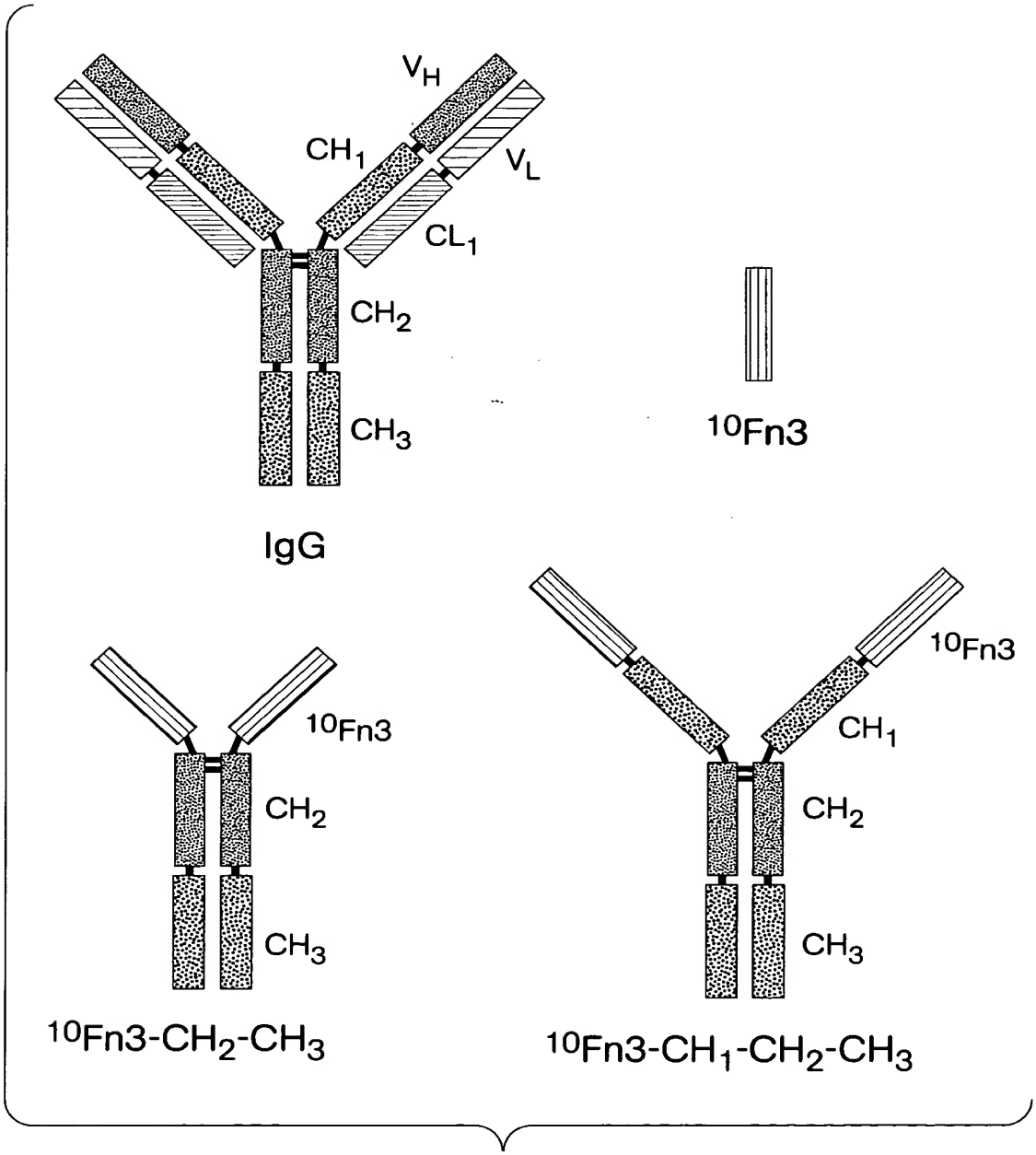
V_H
CH_1
V_L
CL_1
CH_2
CH_3
IgG
$^{10}Fn3$
$^{10}Fn3$
CH_2
CH_3
$^{10}Fn3$-CH_2-CH_3
$^{10}Fn3$
CH_1
CH_2
CH_3
$^{10}Fn3$-CH_1-CH_2-CH_3

Fig. 11

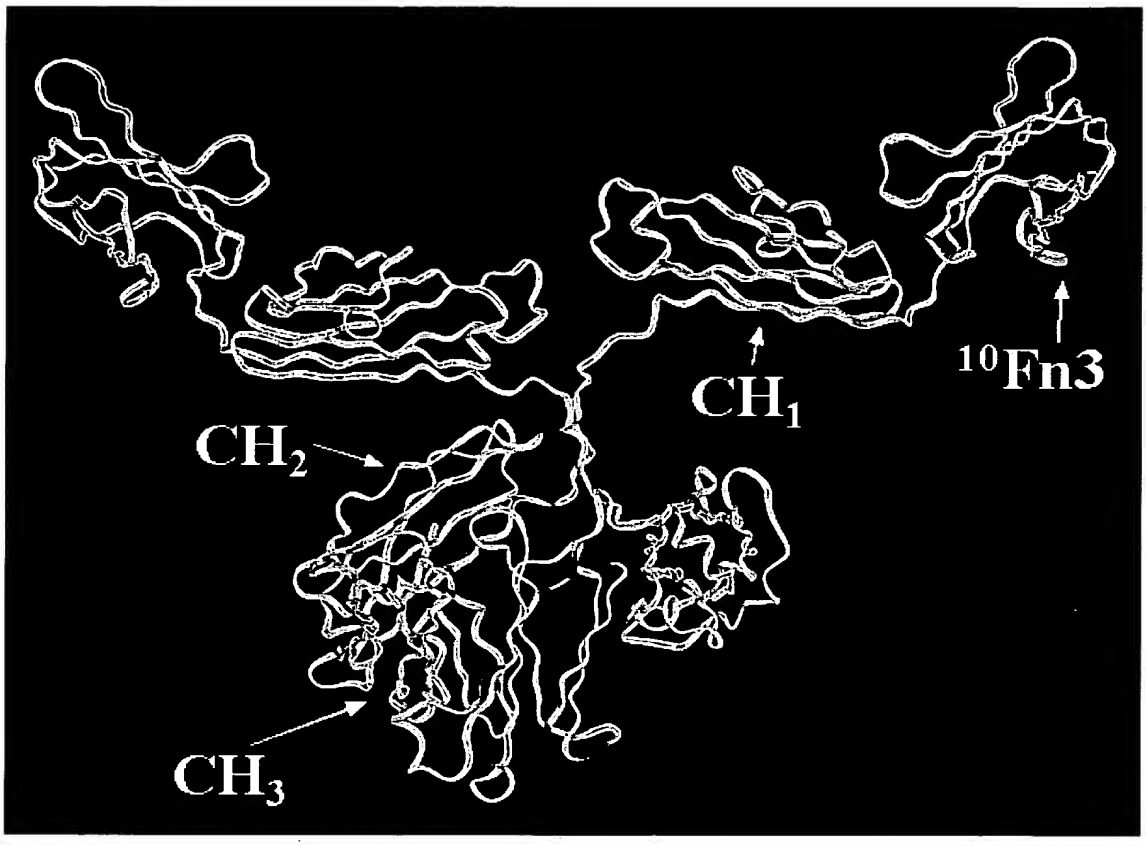

Fig. 12